



# THE COMMONWEALTH OF MASSACHUSETTS

## WATER RESOURCES COMMISSION

100 CAMBRIDGE STREET, BOSTON MA 02114

### **Meeting Minutes for May 11, 2006**

*Minutes approved January 10, 2008*

#### **Members in Attendance:**

Kathleen Baskin	Designee, Executive Office of Environmental Affairs
Marilyn Contreas	Designee, Department of Housing and Community Development
Jonathan Yeo	Designee, Department of Conservation and Recreation
Mary Griffin	Designee, Department of Environmental Protection
Gerard Kennedy	Designee, Department of Agricultural Resources
Margaret Kearns	Designee, Department of Fish and Game
Scott Horsley	Public Member
John Lebeaux	Public Member
David Rich	Public Member
Bob Zimmerman	Public Member

#### **Others in Attendance:**

Mike Gildesgame	DCR	Kerry Mackin	Ipswich River Watershed Assn.
Michele Drury	DCR	Paul Lauenstein	WSCAC/Neponset River Watershed Assn.
Linda Hutchins	DCR	Linda Correia	North Attleborough Water
Bruce Hansen	DCR	Timothy Slattery	North Attleborough DPW
Sara Cohen	DCR	Erik Vaisey	Vaisey Irrigation, Marshfield, MA
Frank Hartig	DCR	Jim Rolfe	AquaSave Irrigation Conservation
Anne Monnelly	DCR	Richard Bradley	Irrigation Assn. of New England
Margaret Callanan	EOEA	Chris Pine	Irrigation Association of New England
Vandana Rao	EOEA	Peter Weiskel	USGS
Ralph Abele	EPA	Nicholas Khoury	Valley Crest/Irrigation Association of New England
Arleen O'Donnell	DEP	Stephen A. Bokanski	Stanley Fleming & Associates, Boston, MA
Duane LeVangie	DEP	Jane Wheeler	CDM

#### **Agenda Item #1: Executive Director's Report**

Baskin reported briefly on a water forum hosted by the Pioneer Institute. The forum topic was MWRA's long-range water supply planning, including planning for potential uses of water MWRA has conserved over the past twenty years. Baskin noted that the topic has far-reaching implications and is one the Secretary of Environmental Affairs is working on statewide. Baskin

added that the topic of long-range water supply planning is likely to come before the commission in the future.

Hansen provided an update on the hydrologic conditions for April 2006. He reported that April precipitation was deficient. Both streamflow and groundwater levels are low. Reservoir levels are normal and near capacity. The National Drought Mitigation Center rates eastern Massachusetts as moderately dry. Up to six inches of rain are in the forecast in the next five days.

O'Donnell introduced Mary Griffin as the new assistant commissioner for MassDEP's Bureau of Resource Protection and the new designee to the Water Resources Commission for MassDEP.

### **Open Forum:**

Zimmerman called attention to a White Paper by the Massachusetts Water Works Association, dated April 25, 2006. He urged the commission to look at the paper on MWWA's website. The paper discusses MWWA's position on the Water Management Act policy for permit and permit amendment applications and five-year reviews.

### **Agenda Item #2: Vote on North Attleborough's Hillman Well Interbasin Transfer**

Drury called attention to an updated staff recommendation. She summarized the background on the project (see meeting minutes of April 6, 2006) and then summarized the changes made to the preliminary staff recommendation of April, based on discussion at the April commission meeting. She reported that no one besides the town of North Attleborough and commission staff attended the two public hearings held on the project, and no comments were received during the public comment period. Hutchins recapped the hydrological analyses, focusing on the instream flow issues (see revised staff recommendation, May 11, 2006). In answer to questions raised at the previous WRC meeting, Hutchins added that the town of Cumberland does not use the reservoirs for public water supply and that the city of Pawtucket does not have mandated releases from its reservoirs. Drury noted that an additional condition requires the town to provide copies to WRC staff of its Annual Statistical reports for the first five years after the approval of the interbasin transfer; this will allow staff to verify that the town is maintaining its unaccounted-for water below 10 percent and reducing its residential consumption rate.

In response to a question from Contreas, Drury replied that the WRC would receive a copy of the drought management plan that will be submitted to MassDEP. Horsley commented that the hydrologic analyses are based on releases and that natural flows would be much lower. He asked what the natural flow would be without the reservoir. He expressed concern that this water supply and flows in the stream are outside of the town's and the state's legal and physical control, since water rights reside with Pawtucket. Baskin urged commissioners to review condition No. 3 in the staff recommendation. Horsley recommended a contingency plan. Drury responded that the drought plan would address these concerns. LeVangie added that the town has additional water supply sources on the other side of the basin. The drought plan would look at various scenarios, which could include the one noted by Horsley. Hutchins added that the Pawtucket Water Supply Board is updating its water treatment plant, indicating its intent to continue using the reservoir system in the near future. Drury and Baskin said that WRC staff would continue to work with the MassDEP Southeast Region to consider, in the drought

management plan, the scenario with no augmented flow from Pawtucket in order to ensure that North Attleborough would not be without water.

Lauenstein asked if the town would need this well if it reduced its residential water use to 65 gpcd. Drury responded that the town has been using the Hillman well since at least 1987; nonetheless reducing residential consumption would reduce stress on all the sources. She added that the town is working on meeting the residential consumption standard.

<b>V O T E</b>	<p>A motion was made by Yeo with a second by Zimmerman to approve the interbasin transfer of North Attleborough's Hillman well as per the staff recommendation of May 11, 2006 (revised), in order to bring it into compliance with the Interbasin Transfer Act.</p> <p>The vote to approve was unanimous of those present.</p>
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### **Agenda Item #3: Discussion: Water Conservation Standards for the Commonwealth**

Baskin noted a correction to the meeting agenda: the agenda item is a discussion of, not a vote on, the Water Conservation Standards. She added that a vote is expected at the June commission meeting. She also thanked all who submitted comments and noted the comment period would extend through May 19, 2006. All comments received since September 2005 will be compiled into one document and summarized in a memo.

Rao provided background on the Water Conservation Standards, which were adopted in 1992. She noted that the 2004 Water Policy recommends updating of the water conservation standards to reflect improvements in technology and the understanding of water conservation. She concluded by summarizing the reasons for implementing water conservation.

Monnelly described the process of obtaining input from stakeholders through a working group and the chronology of public outreach and hearings. She then highlighted changes made to the standards since 1992, as well as changes made to the revised standards since the last draft reviewed by the commission. Key changes are reflected in the areas of water audits and leak detection; unaccounted-for water; residential water use; and lawn and landscape. She also highlighted key themes of the revised standards.

Zimmerman expressed concern about the ten-year period for implementing the standards for UAW and residential consumption, and noted that this timeline conflicts with MassDEP's permitting policy, which requires compliance within two years. He suggested language such as "as soon as practicable" rather than a specific number. Baskin responded that the Secretary felt it was important to define the performance standards with a numerical limit. Zimmerman suggested conditioning compliance on the basis of MassDEP's schedule for WMA permit and registration renewals rather than an arbitrary timeline, such as ten years. Griffin noted that compliance will be expected sooner in communities in high-stress basins and therefore suggested a more general standard that would allow flexibility. Horsley suggested establishing an outside limit for compliance, such as ten years, but allowing MassDEP to seek compliance sooner through the permitting program. He suggested "demonstrate steady progress" as an alternative to

“strive to meet” along with language tying the standards to MassDEP WMA permits. Zimmerman added that timeframes in the water conservation standards should not exceed timeframes in the WMA permits. Baskin suggested developing language that can be reviewed by EOEA attorneys and added that the water conservation standards should apply to all EOEA programs. Zimmerman reiterated that compliance timelines used in MassDEP’s permits must be specifically referenced in the water conservation standards as having primacy.

Horsley suggested using a more stringent deadline, such as five years, for compliance with the standards in stressed basins. Zimmerman suggested referring to basins with a higher level of stress to cover basins designated as medium-stress basins. He also suggested language such as “up to ten years.”

Yeo expressed strong opposition to reducing the time frames for achieving compliance or removing any of the caveats from the standards for residential consumption and unaccounted-for water. He stated that 10 percent UAW is low, based on his many years of direct experience working with water suppliers with aging infrastructure. He noted that it will take many years for these communities to reduce UAW. He added that it will also take time to reach the residential consumption standard. He added that the conservation standards are intended to serve as statewide guidance, but that some basins may require more stringent timelines for compliance. Baskin repeated that the conservation standards are intended to cover all EOEA programs, and that MassDEP’s WMA policy and interbasin transfer policy are supported by the standards.

Rich expressed concern with the phrase “small portion of UAW” in referring to leakage on page 10 of the draft standards and suggested using a specific percentage of UAW. Monnelly acknowledged that the term used is vague, but said the intent is to work with MassDEP to develop guidance. LeVangie indicated that DEP is working with water suppliers to define insignificant leakage.

Mackin also expressed reservations about the ten-year timeframe for compliance. She suggested moving the reference to ten years from the text of the standards to the footnote providing caveats. She also commented that since UAW is now defined to exclude many things that were previously included, the UAW standard of 10 percent should not be as difficult to meet. She suggested adding a statement that water suppliers currently not meeting the standards should have a plan to meet the standards and a schedule for implementing the plan. In addition, communities already meeting the standards should be encouraged to take further action to reduce water use. Baskin requested that Mackin provide her comments in writing.

Discussion continued on whether major water main breaks should be excluded from UAW. Mackin urged a distinction between the terms “unaccounted-for” and “nonaccount” water. Lebeaux commented that communities should not be penalized if a water main breaks as long as they have been conscientiously replacing and repairing water mains. Monnelly indicated that water main breaks should be considered on a case-by-case basis and could be excluded if an estimate of the water loss can be confidently made and is submitted in writing. LeVangie agreed that there is a need for guidance on water main breaks, and that only major events should be excluded from UAW. The exclusion is intended for nonsystematic breaks that are quickly repaired.

Heidell stated that water suppliers are more comfortable with terms such as “strive for” rather than a numerical standard, such as 65 gpcd. She agreed with Zimmerman that the standards should not conflict with the WMA permitting policy and suggested language stating that the standards apply unless more stringent standards are applied in the WMA permit. Griffin suggested that, instead of specifying a ten-year timeframe for compliance, alternative language be used, such as “...over a reasonable period of time consistent with the authority under the Water Management Act....”

Abele noted that the report on stressed basins was released in 2001 and was based on many years of analysis. He asked commissioners to keep in mind that many stressed basins have been in bad shape for a long time and the intent of the discussion of stressed basins was to try to improve conditions. He added that the Massachusetts water conservation standards are the most comprehensive in New England and other states should be looking at them.

Lauenstein commented that the standard requiring leak detection every two years is feasible even for small communities. As an example, he cited Sharon, which is able to afford to do leak detection every six months. He also asked how to account for water when a master meter is found to be out of calibration at the end of the year. Rich responded that there are so many variables when accounting for water that measurements of water usage are inexact. He recommended that communities not adjust their reporting when they discover meter calibration problems. Monnelly pointed to guidance in Section 2 of the Water Conservation Standards.

O'Donnell reminded the commission of the Administrative Magistrate's instructions in the final decision on the appeals of water withdrawal permit modifications for three Ipswich River communities. The final decision of the MassDEP commissioner (which O'Donnell had distributed at the April WRC meeting) signaled that the Water Resources Commission is charged with the task of developing conservation guidelines, and MassDEP will add conservation conditions to registrations when they come up for renewal. She concluded that the Water Conservation Standards will be an important document that states the intent of the commission in this regard. She noted that only 13 percent of water suppliers hold permits, while 87 percent hold registrations.

Horsley commended staff on the Water Conservation Standards. He suggested that the section on lawn and landscape be made significantly more stringent. He also suggested that Massachusetts develop a policy addressing the question of whether it makes sense to use drinking water to irrigate lawns and gardens. If drinking water is allowed for use in irrigating, then the standards should address how much should be used and under what circumstances. Kearns echoed Horsley's concerns and requested that the standards (in the Overview, page 6, and ICI standards, page 21) clarify that private wells for irrigation are not encouraged.

Kearns asked if a performance standard for reducing infiltration and inflow could be established. Monnelly responded that the task force had difficulty coming up with a number for I/I. Yeo concurred that there is no easy answer for quantifying I/I removal. Hutchins suggested using water banks to reduce I/I and encourage recharge of stormwater. Zimmerman noted the high cost associated with I/I removal, and suggested adding incentives to the section on water banks to

encourage decentralized management of wastewater in order to encourage infiltration disposal of wastewater within the subbasin from which water is removed. Cohen suggested adding a reference to MassDEP's guidance on water banks. Baskin said that staff would continue to investigate the issue.

Rolfe commented that, while the lawn and landscape section (Section 9) includes many good points, he challenged the statement that Massachusetts generally receives enough rainfall to maintain a lawn without irrigation, he said. Lack of sufficient water invites pests, disease, and weeds, resulting in increased use of toxic chemicals. He agreed with the statement that watering only when necessary will keep a lawn healthy and with the statement on maximizing the efficiency of automatic irrigation systems. Gildesgame noted that selection of native, drought-resistant grass species and proper soil preparation will reduce landscape water requirements. Rao noted that the revised water conservation standards incorporate most of the comments received from the irrigation association. Lauenstein called attention to the brochure, "Secrets of a Waterless Lawn," and noted that he never waters the lawn featured in the brochure, and the secret is the topsoil. He endorsed the language in the water conservation standards. Pine thanked the commission for the opportunity to provide input on behalf of the Irrigation Association and expressed interest in continuing to work with the commission.

Baskin again invited submission of written comments by May 19 and noted that the draft final water conservation standards will be posted on the Water Resources Commission web site.

Lebeaux requested that a document tracking changes made in response to comments be made available. Baskin explained the documents that would be available for review by the commission and the public. She added that the standards would be brought to the commission for a vote at the June meeting.

The meeting was adjourned into Executive Session for the purpose of discussing litigation strategy.

<b>V O T E</b>	A motion was made by Yeo with a second by Lebeaux to enter into Executive Session.
	The vote to approve was unanimous of those present.
	A motion was made by Rich with a second by Contreas to exit Executive Session.
	The vote to approve was unanimous of those present.

Attachments distributed:

- Current Water Conditions in Massachusetts, May 11, 2006
- Water Resources Commission. Staff Recommendation Draft Findings, Revised. May 11, 2006. Town of North Attleboro Hillman Well, Interbasin Transfer Act.
- Summary of changes from the April 6, 2006, Staff Recommendation for the North Attleborough Hillman Well IBT incorporated into the May 11, 2006, draft findings.
- Executive Office of Environmental Affairs and Massachusetts Water Resources Commission. Water Conservation Standards, Draft Final. May 2006.
- Water Conservation Standards, Section 9.0, Lawn and Landscape (revised).